U.S. Serial No.: 10/663,793 Attorney Docket No.: 033082M177

In the Abstract:

Please replace the current Abstract with the following new Abstract:

--A coating method for a internal member having holes of forming a coating film of ceramic material on a surface of an internal member disposed in a vacuum processing apparatus is provided. The method includes a process, the surface of the internal member having holes formed therein. The method involves: (A) of filling small the holes 78 of the internal member 81 with padding plugs 20, each of which has a core member 22 made from a metal material and a metal-resin composite layer 24 covering the circumferential surface of the core member 22, the metal-resin composite layer 24 being a complex consisting composed of a metal material and a resinous material exhibiting nonconjugative property to a coating film 80; a process (B) of forming the a ceramic coating film 80 on the surface of the internal member 81 by plasma spraying after the process step (A); and a process (C) of extracting the padding plugs 20 out of the holes 78 after the process step (B). By this coating method, it becomes possible to solve-various problems about the technique of filling the holes with the pudding plugs, so that a coating film superior in its quality performance can be produced effectively. --